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A PROSPECTIVE CROSS-SECTIONAL STUDY OF THE TREATMENT OF PATIENTS WITH VIRAL FEVER IN KRISHNAGIRI DISTRICT.

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Abstract:

Viral fevers are a range of viral infections with potential to cause life threatening effects in humans' life. Viral fevers are a group of illness caused majorly four families of viruses. They are like ebola, merbunglassa fever and yellow fever viruses. In ancient periods, the largest ever epidemic crimen-congo viral fever (CVV), ebloa virus disease (EVP) made life-threat and major impact and problem in humans' lifestyle, at present the largest ever epidemic of COVID-19 viral fever made more impact in humans' life. Diagnosis and management is challenging due to non-specificity of early symptom, limited laboratory facilities endemic areas. Severity of disease, lack of effective therapy, strict in infection, control requirements and propensity to cause epidemic with secondary cases in workers. Viral fevers affect many organs, blood vessels and they also affect the body ability to regulate itself.

***Key Word**: viral fever, Ebola virus, personal hygiene, food habits.*

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INTRODUCTION:

Viral fever refers to a group of illness caused by several families of viruses including, filoviridae, arenaviridae, bunyaviridae, flaviviridae.

Viral fevers are virulent, highly infectious with person-to-person transmission from direct contact with infected blood and body secretion. The term" viral fever" was first used in early 1950s to designate an illeness that occurred sprodically among soldiers fighting in Korean war. Pathway of viral fever mainly divided into two types as, humoral pathway and neural pathway. In humeral pathway, fever signals are carried by components of microbial products or pathogens by pyrogenic cytokines. In neural pathway, peripheral fever signals can communicate with the CNS through peripheral nerves such as cutaneous sensory nerves and the vagus nerves.

Causes of viral fever like, air droplets inhalation, food product ingestion, mosquito bites and body fluids exchange.
Types of viral fevers as respiratory viral fever, gastro intestinal viral fever, exanthematous viral fever, haemorrhagic viral fever and neurologic viral fever.

Symptoms like, fatigue, dizziness, muscle ache, loss of strength, etc,.

Pathophysiology of viral fever: The diversity of clinical features scene among viral fever infections probably originates from varying mechanisms of pathogenesis. An immunopathogenic mechanism, for eg, dengue fever, which usually occurs among patients previously infected with a heterogenous dengue serotype. An influential theory explains "antibody dependent management"

Complications: body temperature rises above 103 F(39.4°C) then a person is advised to consult a professional or doctor as it can lead to various complications and diseases such as malaria. Taking bath in cold water should be avoided to let the body cure and fight viruses by itself and cold bath make adverse effects on human's body.

Test and diagnosis: viral fever and bacterial symptoms are similarly same. It may challenge to analysis and diagnosis action. WBC count test to conform the diagnosis of viral fever. The doctor could also advise undergoing a CT scan or chestX Ray rule out any other infections, consult out specialist doctors, who provide an expert medical diagnosis with minimal required lab test.

Preventions: The first and foremost prevention trick maintaining personal hygiene. Avoid sharing food, drinks and belonging with other people to prevent the spread of virus and viral fever. Eat healthy and warm food will help to reduce viral infections. Get flu vaccination is another preventive measure in viral fever infections.

Treatment: paracetamol and ibuprofen for low grade viral fever medicines, for high grade viral fever, doctor might prescribe a high dose of paracetamol to be taken more frequently in a day like 4 to 6 hours to alive the discomfort.

PATIENT AND METHADOLOGY:

NAME OF THE STUDY

Prescription pattern off medication given in the treatment of viralfever.

STUDY DESIGN

A prospective cross-sectional study was performed on 100 patients to know the prescribing patterns of medication used in the treatment of viral fever for six months between July 2021 to January 2022.

STUDY SITE

The study was conducted over in-patients.

DURATION OF STUDY

The study was conducted for six months.

STUDY POPULATION

Patient who visited the **St. Louis hospital** with fever were included in study.

SAMPLE SIZE

A total of 100 patients were enrolled in this study.
The patients who had viral fever were included in this study.

STUDY CRITERIA
INCLUSION CRITERIA

- Only prescription of the patients who are diagnosed to have viral fever.
- Viral fever patients with either sex.
- Patients who were enrolled to participate in study.
- Patients diagnosed with viral fever
- In patient for viral fever

EXCLUSION CRITERIA

- Patient who are not enrolled to participate in the study.
- Patients who visited for other purpose like cold, cough.

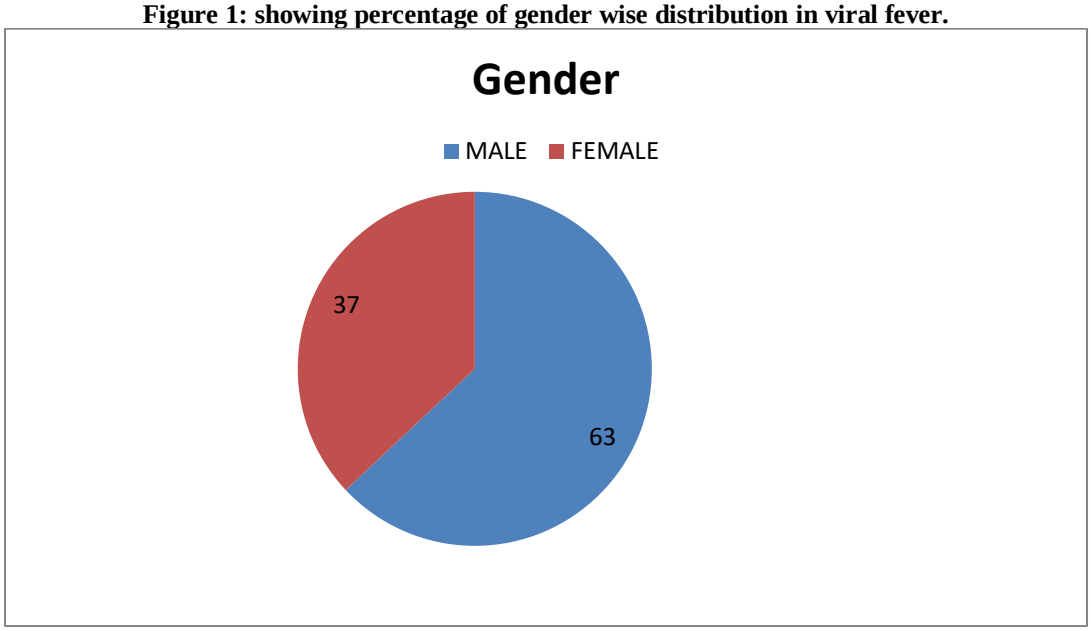
RESULTS AND DISCUSSION:

GENDER WISE DISTRIBUTION

Table 1: showing gender wise distribution in viral fever.

Gender	No of patient	Percentage %
Male	63	63%
Female	37	37%
TOTAL	100	100%

Figure 1: showing percentage of gender wise distribution in viral fever.



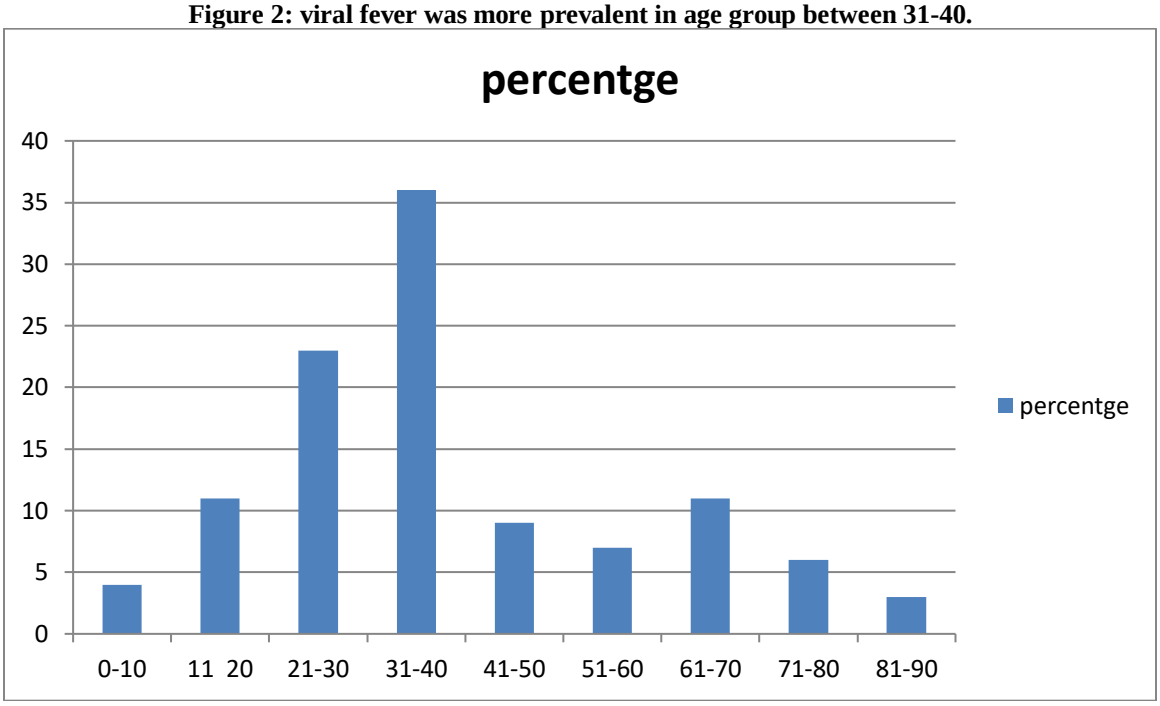
Out of 100 patient 63 % were male and 37% were female. According to this male were prevalent to viral fever than female. The data were presented in table no.1 and figure no1.

AGE WISE DISTRIBUTION

Table 2: showing age wise distribution in viral fever.

Age group	No of patient	Percentage
0-10 years	4	4%
11-20 years	11	11%
21-30 years	23	23%
31-40 years	36	36%
41-50 years	09	9%
51-60 years	07	7%
61-70 years	11	11%
71-80 years	06	6%
81-90 years	03	3%
TOTAL	100	100%

Figure 2: viral fever was more prevalent in age group between 31-40.



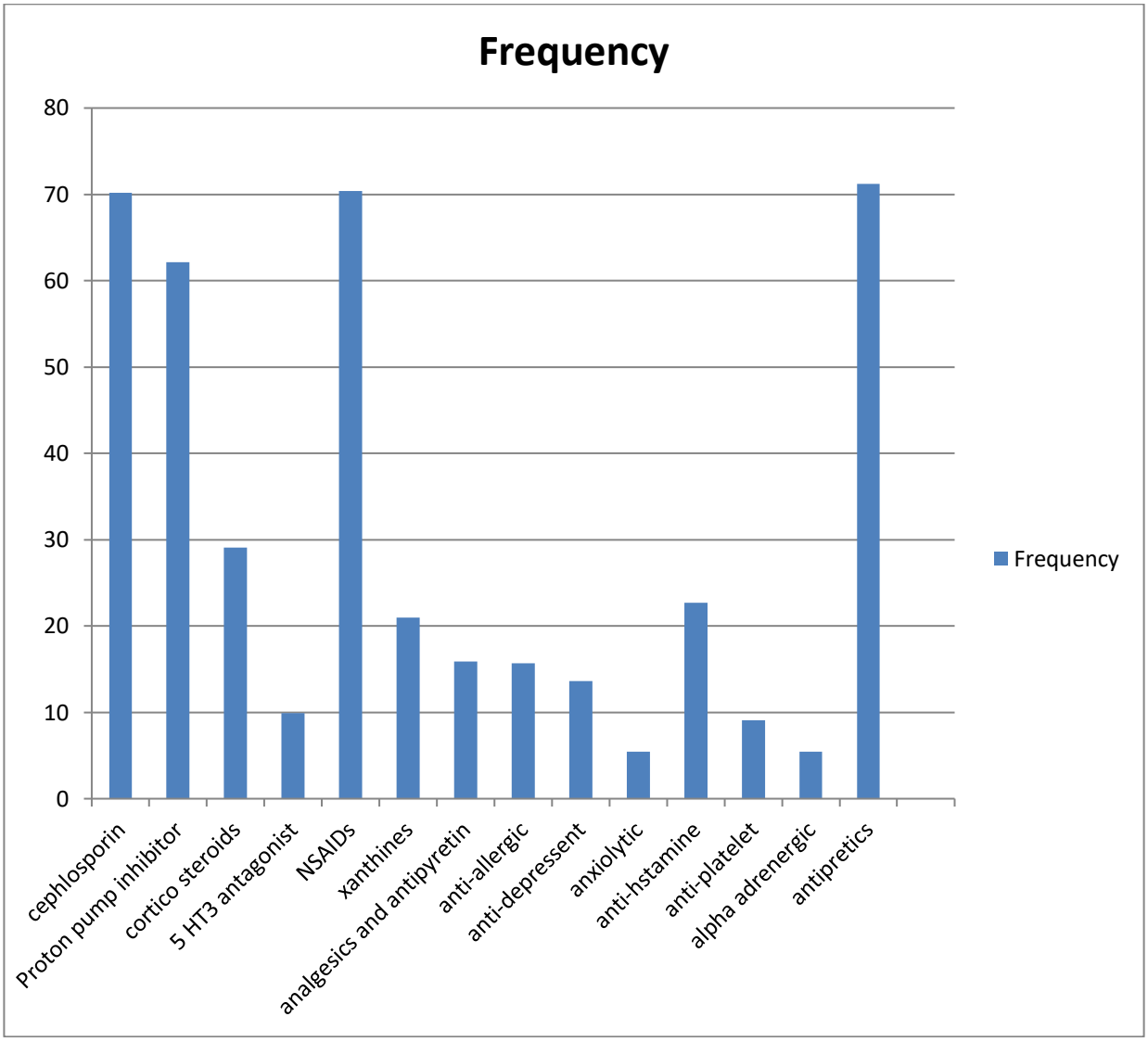
In this study revealed that viral fever was more prevalent in the age group 31 to 40 years(36%)followed by the age group of 21 to 30 (23%), 11 to 20(11%), 61-70(11%), 11-20(11%), 41-50(9%), 51-60(7%), 71-80(6%), 0-10(4%), 81-90(3%).The age wise distribution was made for the patient with different age group, such s 0-10, 11-20,21-30,31-40,41-50,51-60,61-70,71-80,81-90. About 36% of patient were aged 31-40 followed 23% were aged 21-30. The data's were presented in table no.2 and figure no2.

DETAILS OF DRUG PRESCRIBED

Table 3: Illustrating details of drugs prescribed for patient with viral fever

Drug name	No. of prescription	Frequency
Cephalosporin	80	70.2%
Proton pump inhibitor	68	62.17%
Corticosteroids	32	29.09%
5-HT3 antagonist	11	9.89%
NSAIDs	72	70.4%
xanthines	28	21%
Analgesics and antipyretic	24	15.91%
Anti-allergic	22	15.71%
Anti-depressent	15	13.63%
Anxiolytic	6	5.45%
Anti-histamine	27	22.7%
Anti-platelet	10	9.09%
Alpha adrenergic	6	5.45%
Antipyretics	82	71.2%

Figure 3: Illustrates prescribing pattern of drugs in this study population.



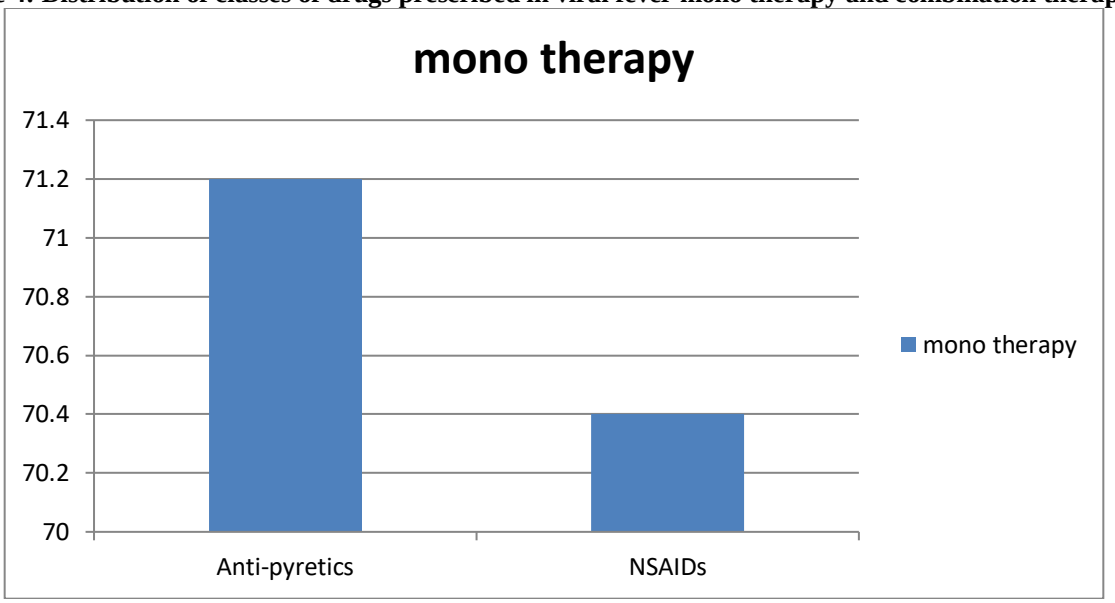
Most commonly prescribe drug was Antipyretics as 71.2%, followed by NSAIDs 70.4%, cephalosporin 70.2%, proton pump inhibitor62.17%, corticosteroids 29.09%, Anti histamine 22.7%, xanthines 21%, analgesic and antipyretic 15.91%,Aanti allergic 22%, Antidepressant 13.63%, 5-HT3 antagonist 9.89%, Anti platelet 9.09%, anxiolytic 5.45%, alpha adrenergic 5.45%. The data's were presented in table no.3 and figure no.3.

MONOTHERAPY

Table 4: Distribution of classes of drugs prescribed in viral fever a mono therapy and combination therapy.

Drug groups	Mono therapy %
Antipyretics	82(71.2%)
NSAIDs	72(70.4%)

Figure 4: Distribution of classes of drugs prescribed in viral fever mono therapy and combination therapy.

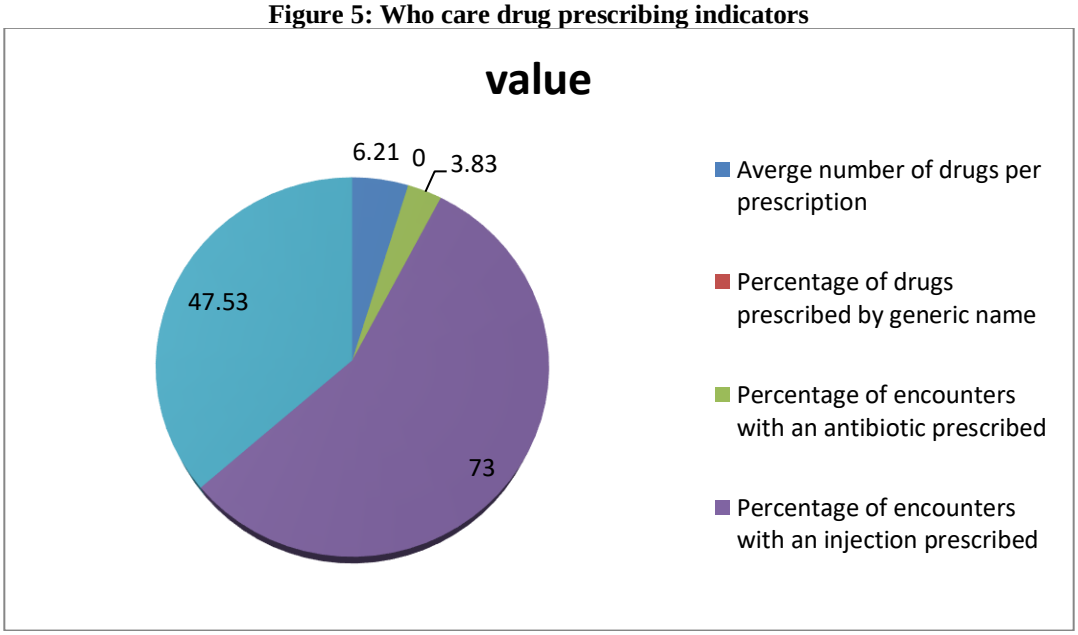


The study revealed that antipyretics was highly distributed as mono- therapy 71.2% followed by NSAIDs (70.4%). The data were presented in table no.4 and figure no.4.

Table 5: Who care drug prescribing indicators

Parameter	Value
Average number of drugs per prescription	6.21%
Percentage of drugs prescribed by generic name	Nil
Percentage of encounters with an antibiotic prescribed	3.83%
Percentage of encounters with an injection prescribed	73%
Percentage of drug prescribed from essential drug list	47.53%

Figure 5: Who care drug prescribing indicators



The study revealed that there was no drug prescribed with its generic name, Percentage of encounters with an antibiotic 3.83%, Average number of drugs per prescription is 6.21%, Percentage of encounters with an injection was 73%, Percentage of drug prescribed from essential drug list was 47.53%. The data were presented in table no.5 and figure no.5.

CONCLUSION:

To conclude this, most of the prescription was rational, though further improvement is needed. The study indicated that the choice of anti-viral remained more less the same compared to previous studies. Viral fever is most common in elderly patient since the disease was more prominent in the age group 31-40. The study revealed oseltamvir phosphate was most utilizes antiviral drug for viral fever patient. Most of viral fever patients have co-morbid conditions; therefore, they require more than one medication for their proper was compliant with NICE (National for Health and Clinical Excellence) guidelines hence it was ration.

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